

OPEN SOURCE CODING

MODULE CODE: OPSC6312

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Introduction

Welcome to the fascinating world of birds, where each flutter of the wings and musical chirp reveals a different tale. You are invited to take an enthralling tour of the world of feathery companions with the help of our Bird Watch App. Our app is your entryway to the fascinating world of birds, whether you're an expert ornithologist or a curious amateur. We are here to improve your bird-watching experience like never before with a user-friendly interface, rich multimedia information, and potent identification tools. As we introduce you to nature, one bird at a time, join us in admiring the avian world's beauty, diversity, and allure. Spread our wings and go on the exciting world of bird watching.

Brief description overview

App Name: BeakFinder

Icon Design: The app icon could feature a stylized image of a bird's beak, perhaps forming the shape of a magnifying glass, symbolizing the app's focus on finding and identifying bird species.



App Overview:

BeakFinder is your ultimate companion for birdwatching enthusiasts, whether you're a seasoned birder or just starting your journey into the world of avian wonders. With a host of innovative features, BeakFinder makes birdwatching more accessible and enjoyable than ever before.

Innovative Features:

1.Register- This is where users can create a new account on your platform. It typically involves filling out a registration form with their personal information, such as name, email address, and password.

2.Login- The login page is where registered users can sign in to access their accounts. They usually need to enter their username or email and password to authenticate themselves.

3.Settings- The settings page allows users to customize their preferences and configurations on your platform. This can include options like changing their password, notification settings, and other account-related settings

4.Birding Hotspots- This page or section likely provides information and details about various birding hotspots. Users can explore these locations to plan their birdwatching trips. Information may include location descriptions, bird species sightings, and maps.

5.Filtered Bird Hotspots- This section or page likely displays a list of birding hotspots that have been filtered or sorted based on certain criteria. Users might be able to apply filters like location, bird species, or date to refine their search for birding locations.

6.Current Position- This section or feature might provide users with information about their current geographical position. It could be used to help users locate themselves on a map in relation to nearby birding hotspots.

7.Select a hotspot- Using the various hotspots, user can then select the appropriate hotspot

8.Calculate Best route- Once the user has selected a hotspot, a route best suited to get to the hotspot will be selected

9.Visually – the embedded map displays the selected route

9.Save and View bird observation- The gallery is a collection of bird-related images or photos. It could feature pictures of birds, birdwatching events, or anything related to birdwatching. Users may be able to upload and share their own birding photos in this section.

1. Register



This is where users can create a new account on your platform. It typically involves filling out a registration form with their personal information, such as name, email address, and password.

Register

username:

Name:

Surname:

Password:

Already have an account? [Log in](#)

[Sign Up](#)

2. Login



The login page is where registered users can sign in to access their accounts. They usually need to enter their username or email and password to authenticate themselves.

Login

username:


Password:

Don't have an account? [Sign up](#)

[Sign Up](#)


3. User Profile


Beak FinderWelcome, Marry





Marry Peterson
Bio:


I love birds

 Check Settings

 View Nearby Birding Hotspots on a Map


 Display Hotspots Filtered

 User's Current Position



The user profile is a personalized page for each registered user. It typically displays their personal information, such as name, profile picture, and any additional details they've provided. Users can often edit their profile information here.

4. Settings

 Settings

Please Select:


☐ The metric system (kilometres)
☐ the imperial system (miles)

Maximum distance:
The distance that you are willing to travel
to a bird watching hotspot.

Save


The settings page allows users to customize their preferences and configurations on your platform. This can include options like changing their password, notification settings, and other account-related settings


5. Hotspots Filtered

 Hotspots Filtered

Please select the maximum distance

Example 10km





This section or page likely displays a list of birding hotspots that have been filtered or sorted based on certain criteria. Users might be able to apply filters like location, bird species, or date to refine their search for birding locations.

6. Gallery

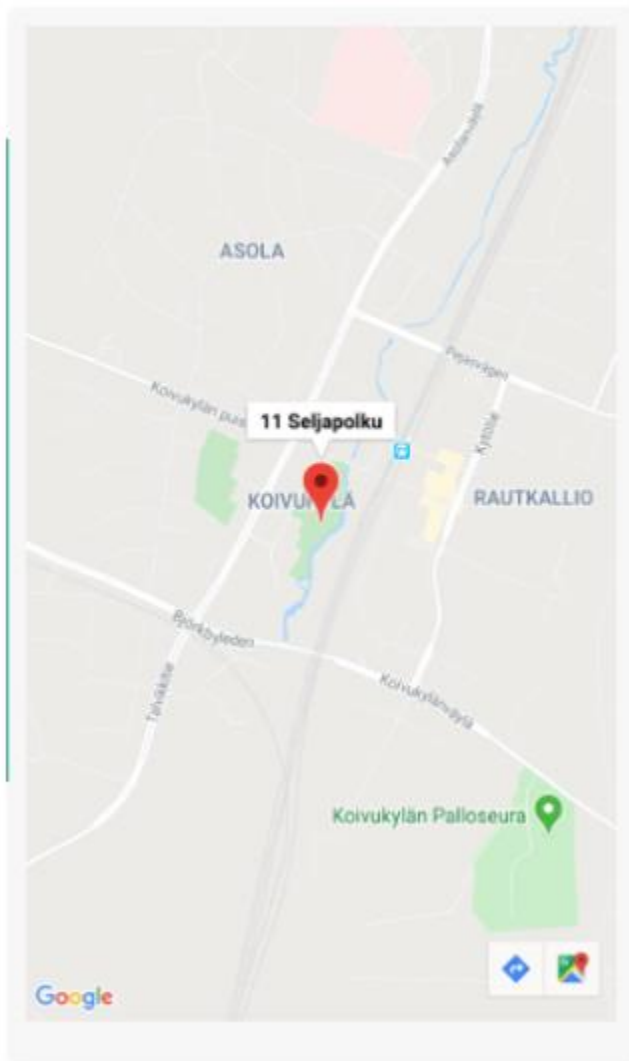
Bird Gallery



The gallery is a collection of bird-related images or photos. It could feature pictures of birds, birdwatching events, or anything related to birdwatching. Users may be able to upload and share their own birding photos in this section.

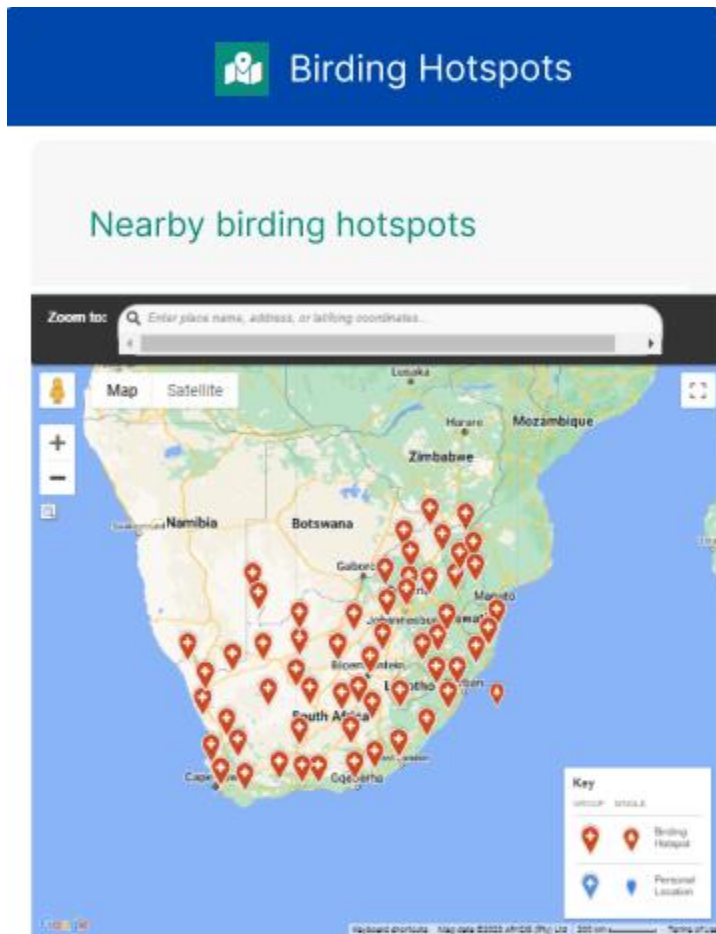
7. Current Position

 Current Position



This section or feature might provide users with information about their current geographical position. It could be used to help users locate themselves on a map in relation to nearby birding hotspots.

8. Birding Hotspots



This page or section likely provides information and details about various birding hotspots. Users can explore these locations to plan their birdwatching trips. Information may include location descriptions, bird species sightings, and maps.



Navigation Diagram

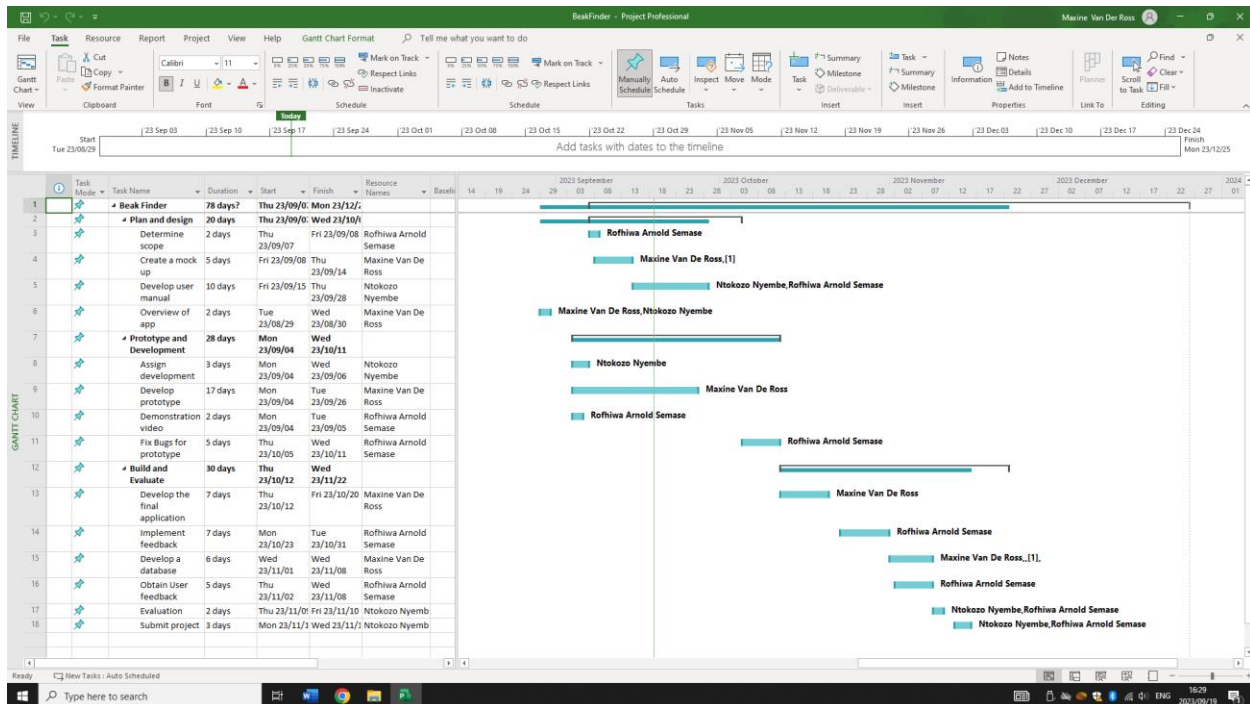


PROFILE DATA

DATA	DATA-TYPE	DETAILED
Username	String	User-selected unique username used for identification.
Name	String	Users Name
Surname	String	Users Surname
Password	String	password with a strong hash for authentication.
Preferred Unit System	Boolean	The user's preference for using the metric system (kilometers) or the imperial system (miles) is stored as a boolean value or enumeration.
Maximum Distance	Float	The distance (in miles or kilometers) the user is willing to travel to a hotspot for birdwatching.
Location	Latitude and Longitude	GPS coordinates of the observation point (latitude and longitude).
Profile Picture	Image/File	User's profile picture or avatar, stored as an image file.

Database Storage	<p>The information mentioned above has to be safely kept in a hosted database online. The database should contain the proper tables and fields to store information about user registration and profiles, user settings, bird observations, and any other information relevant to gamification or advanced features.</p> <p>This data structure ensures data integrity and security while enabling the app to collect and store crucial information for user registration, preferences, bird observations, and any other user-related data.</p>
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Project Plan: Gantt chart



Conclusion

BeakFinder, a digital portal to the delights of birding, bridges the gap in a world where technology frequently removes us from nature. So, whether you're looking to identify a rare species, record your birdwatching adventures, or simply enjoy the beauty of birds, BeakFinder is your trusty friend on this avian voyage. Begin your journey today and let BeakFinder take your birdwatching to new heights. Enjoy your birding!